



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,809	04/20/2001	Grant E. DuBois	04286.00010	3526

22852 7590 03/20/2003

FINNEGAN, HENDERSON, FARABOW, GARRETT &  
DUNNER LLP  
1300 I STREET, NW  
WASHINGTON, DC 20006

EXAMINER

PADEN, CAROLYN A

ART UNIT	PAPER NUMBER
----------	--------------

1761

DATE MAILED: 03/20/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/838,809

Applicant(s)

DUBOIS ET AL.

Examiner

Carolyn A Paden

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16, 17, 19-21, 23-25, 27-29, 32, 34-37, 40-91 is/are rejected.
- 7) ☒ Claim(s) 15, 18, 22, 26, 30, 31, 33, 38 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,6,9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1761

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9, 21, 29, 37, 44, 64, 73 and 82 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sher et al. (6,468,576) and see column 3, lines 30-35 and column 5, lines 7-36.

Sher discloses a frozen slush liquid concentrate. At column 3, lines 30-35, carbonation of the beverage is disclosed as a part of the invention. At column 5, lines 6-36, the use of a freezing point depressant is disclosed to include propylene glycol or glycerol.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 45, 65, 66, 74 and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sher (6,468,576)

Sher discloses a frozen slush liquid concentrate. At column 3, lines 30-35, carbonation of the beverage is disclosed as a part of the invention. At column 5, lines 6-36, the use of a freezing point depressant is disclosed to include propylene glycol or glycerol. The claims appear to differ from the references in the selection of the particular freezing point depressants together. To use the freezing point depressants together in a frozen slush beverage would have been an obvious way to utilize all of the ingredients on hand in food processing operation.

Claims 29 and 32, 34, 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sher as applied to the claims above, and further in view of Marulich and deTroostembergh taken together.

Sher discloses a frozen slush liquid concentrate. At column 5, lines 6-36, the use of a freezing point depressant is disclosed to include propylene glycol or glycerol. The claims appear to differ from Sher in the use of erythritol as a freezing point depressant. Marulich is relied upon to show that polyhydric alcohols or sugar alcohols are well known freezing point depressants for use in beverages. De Troostembergh is relied upon to show that erythritol is a sugar alcohol which has the additional advantage of being anti-cariogenic in foods. Thus, with the references

Art Unit: 1761

before him, it would have been obvious to one of ordinary skill in the art to use erythritol as a freezing point depressant in the beverage of Sher.

Claims 1, 4-6, 44-47, 49, 51, 5, 9, 13, 14, 20, 55, 57, 58, 60, 62, 64, 67, 69, 21, 64, 67, 29, 73, 76, 37, 82 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baccus (4,986,994 or 5,069,924) as further evidenced by Marulich (5,069,924).

The specification in each of the Baccus applications appears to be the same but the Baccus (924) reference is specifically referred to in the discussion of the reference. Baccus discloses a low calorie slush beverage. In the example at column 5, water, aspartame and propylene glycol are mixed with high fructose corn syrup. Then the composition is additionally modified and carbonated with carbon dioxide and frozen to make a low calorie beverage. The reference does not state that there is a freezing point depressant in the composition. Marulich is relied upon for evidence that propylene glycol and polyhydric alcohols were known at the time of the Baccus invention to be freezing point depressants. Thus the reference demonstrates that the composition inherently possesses a freezing point depressant.

Art Unit: 1761

Claims 1, 2, 4-6, 44-47, 49, 51, 9, 10, 12-14, 16, 17, 20, 55-58, 60, 62, 21, 24, 25, 28, 64-67, 71, 29, 32, 34, 37, 40-43, 82, 83, 85, 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baccus (either 4,986,994 or 5,069,924) in view of Sakai (4,770,889).

The specification in each of the Baccus applications appears to be the same but the Baccus (924) reference is specifically referred to in the discussion of the reference. Claims 1, 4-6, 44-47, 49, 51, 5, 9, 13, 14, 20, 55, 57, 58, 60, 62, 64, 67, 69, 21, 64, 67, 29, 73, 76, 37, 82 and 85 do not appear to differ from Baccus at all. Baccus discloses a low calorie slush beverage. In the example at column 5, water, aspartame and propylene glycol are mixed with high fructose corn syrup. Then the composition is additionally modified and carbonated with carbon dioxide and frozen to make a low calorie beverage. The reference does not state that there is a freezing point depressant in the composition. Marulich is relied upon for evidence that propylene glycol and polyhydric alcohols were known at the time of the Baccus invention to be freezing point depressants. Thus the reference demonstrates that the composition inherently possesses a freezing point depressant. The claims appear to differ from Baccus in the use of other polyhydric alcohols or sugar alcohols in foods.

Art Unit: 1761

Sakai teaches the use of sorbitol and maltitol as sweeteners that can be used with aspartame in foods, including beverages. Sakai also teaches that sugar alcohols are effective in enhancing the taste of sweetness in foods. It would have been obvious to one of ordinary skill in the art to include sorbitol or maltitol in the formulation of Baccus in order to enhance the sweet taste of the low calorie slush beverage. It is appreciated that the reference does not state that maltitol acts as a freezing point depressant but Marlich teaches that this is a known property of sugar alcohols or polyhydric alcohols.

Claims 3, 7, 8, 11, 19 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baccus (either patent) as further evidenced by Marulich and in view of Sakai (4,770,889) as applied to the claims set forth above, and further in view of de Troostembergh (6,177,064).

The claims appear to differ from the reference in the suggestion that erythritol is a selected sugar alcohol in Baccus. De Troostenberg teaches that erythritol is useful replacement for a sweetener in foods because it provides anti-cariogenic activity. Thus it would have been obvious to one of ordinary skill in the art to select erythritol, particularly, for the sugar alcohol in Baccus because of its anti-cariogenic activity. It is appreciated

Art Unit: 1761

that the utility of erythritol as a freezing point depressant is not mentioned but this is an inherent property of the compound (see Marulich for evidence of this assertion).

Claims 1, 5, 9 and 44-46 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Marulich (3,826,829).

Marulich discloses a slush beverage that is carbonated and is formed with water, sugars, polyols, flavor and coloring agents (see abstract). At column 3, lines 52-62, the concept of using polyhydric alcohols such as glycerol, sorbitol and propylene glycol and combinations thereof is indicated. Carbonation of the beverage is additionally shown at column 4, lines 1-4.

Claims 1, 2, 4, 6, 5, 9, 10, 12, 13, 14, 16, 17, 20, 29, 32, 34, 36, 44-63, 73-81, 37, 40-43 and 82-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marulich (3,826,829) in view of Beyts (5,380,541).

Marulich discloses a slush beverage that is carbonated and is formed with water, sugars, polyols, flavor and coloring agents (see abstract). At column 3, lines 52-62, the concept of using polyhydric alcohols such as glycerol, sorbitol and propylene glycol and combinations thereof is indicated. Carbonation of the beverage is additionally shown at column 4, lines 1-4. Claims 1, 5, 9 and 44-46 do not appear to differ from Marulich at all. The



Art Unit: 1761

remaining claims appear to differ from the reference in the suggestion of the inclusion of sugar alcohols and sucralose in the composition. Beyts teaches that sucralose is a sweetener which can be combined with other sweeteners, including sugar alcohols like sorbitol, lactitol and maltitol (see column 5). Beyts also teaches that these sweetening combinations provide synergistic levels of sweetness. It would have been obvious to one of ordinary skill in the art to utilize the sweetening composition of Beyts in the frozen carbonated beverage of Marulich in order to enhance the sweetness of the product without the extra ingredient cost. It is appreciated that sugar alcohols or polyhydric alcohols are not stated to be freezing point depressants in Beyts but this property is described to be well known in the art in Marulich.

Claims 21, 64, 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marulich in view of Beyts as applied to the claims rejected above, and further in view of Sher.

The claims appear to differ from Marulich in the recitation of the formulation of a non-carbonated beverage. Sher teaches the non-carbonated beverages can be carbonated. It would have been obvious to one having ordinary skill in the art prepare a non-carbonated beverage

Art Unit: 1761

from the formulation of Marulich in order to expand the product line of a beverage company.

Claims 5, 12, 21, 25, 64, 65, 67, 69, 71, 37, 40, 41-43, 82-85 and 87 are rejected under 35 U.S.C. 102(b) as being anticipated by Stefandl.

Stefandl discloses a freezer adapted beverage. The beverage contains a carbohydrate component, a glycerol or glycol component and a sugar alcohol (paragraph 0025). The sugar alcohols of claim 2 are disclosed at paragraph 0030. Non-carbohydrate sweeteners are shown at paragraph 0033. Marulich is relied upon for evidence that polyhydric alcohols are known freezing point depressants.

Claims 15, 18, 22, 26, 30-33, 38, 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn A Paden whose telephone number is 703-308-3294. The examiner can normally be reached on Monday to Friday from 7am to 3:30pm.

Art Unit: 1761

The fax phone number for the organization where this application or proceeding is assigned is 703-305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

*Carolyn Paden*  
CAROLYN PADEN 3-17-03  
PRIMARY EXAMINER  
GROUP 1300-1761